

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

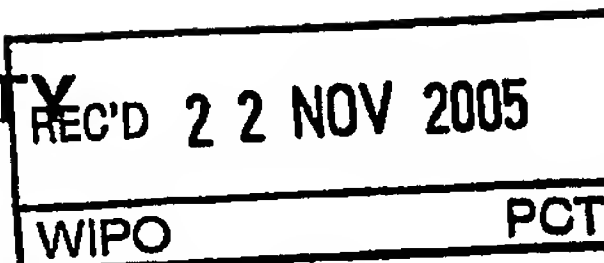
(PCT Rule 44bis)

Applicant's or agent's file reference jac.3466.pct.sb.k	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/GB2004/004051	International filing date ( <i>day/month/year</i> ) 22 September 2004 (22.09.2004)	Priority date ( <i>day/month/year</i> ) 23 September 2003 (23.09.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant CALICO JACK LIMITED		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 6 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 740 14 35	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Date of issuance of this report 27 March 2006 (27.03.2006)</td> </tr> <tr> <td style="padding: 5px;">Authorized officer  Nora Lindner</td> </tr> <tr> <td style="padding: 5px;">Telephone No. +41 22 338 89 65</td> </tr> </table>	Date of issuance of this report 27 March 2006 (27.03.2006)	Authorized officer  Nora Lindner	Telephone No. +41 22 338 89 65
Date of issuance of this report 27 March 2006 (27.03.2006)				
Authorized officer  Nora Lindner				
Telephone No. +41 22 338 89 65				

# PATENT COOPERATION TREATY



From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

## PCT

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/GB2004/004051

International filing date (day/month/year)  
22.09.2004

Priority date (day/month/year)  
23.09.2003

International Patent Classification (IPC) or both national classification and IPC  
G06N5/04

Applicant  
CALICO JACK LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2  
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Authorized Officer

Kingma, Y

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2004/004051

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2004/004051

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or  
industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	14-17,22-30,32,33
	No: Claims	1-13,18-21,31
Inventive step (IS)	Yes: Claims	
	No: Claims	1-33
Industrial applicability (IA)	Yes: Claims	1-33
	No: Claims	

2. Citations and explanations

see separate sheet

**Re Item V.**

1 Reference is made to the following documents:

D1 : BELLIFEMINE F ET AL: "DEVELOPING MULTI-AGENT SYSTEMS WITH A FIPA-COMPLIANT AGENT FRAMEWORK" SOFTWARE PRACTICE & EXPERIENCE, WILEY & SONS, BOGNOR REGIS, GB, vol. 31, no. 2, February 2001 (2001-02), pages 103-128, XP000987538 ISSN: 0038-0644

D2 : DATABASE INSPEC [Online] THE INSTITUTION OF ELECTRICAL ENGINEERS, STEVENAGE, GB; 10 November 2001 (2001-11-10), BRUNETON E ET AL: "An architecture for extensible middleware platforms [computer aided learning]" XP008055717  
Database accession no. 7105784

2 INDEPENDENT CLAIM 1

2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. Document D1 discloses (the references in parentheses applying to this document):

Computing means having a software agent for representing a person in the virtual environment, the software agent comprising:

(Summary: "... large scale realization of agent applications...")

one or more application specific modules each of which represents application specific features of the agent;

(page 115, Figure 3, boxes with "active agent behaviours")

a core module which contains one or more functional groups which define common or generic features of the agent, said features at least in part facilitating interagent communication,

(page 110, paragraph header "Message delivery subsystem")

such that inter-agent communication supports communication between a combination of the one or more application specific module and the core module.

(page 110, Figure 2, "Application Agent" boxes connected to "distributed agent platform").

**3 INDEPENDENT CLAIM 31**

- 3.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 31 is not new in the sense of Article 33(2) PCT. Document D1 further discloses (the references in parentheses applying to this document):

A computer program comprising program instructions for causing a computer to operate a software agent as claimed in any of claims 1 to 17.

(Summary: 2nd paragraph, "... software framework to build agent systems")

**6 DEPENDENT CLAIMS 2-30, INDEPENDENT CLAIMS 32-33.**

Claims 2-30 and 32-33 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT) when considering D1 and/or D2, see the passages cited in the search report.

For example, the following features are explicitly disclosed in D1:

(claim 2) basic generic reasoning tools,

(D1, page 117, lines 7-8 "... a scripting environment for rule based programming..")

(claim 7) the specification of message conversation protocols and the specification of primitive message semantics are implemented in separate modules,

(D1, page 109, lines 1-2 "4. Java API to send/receive messages ... "

D1, page 109, lines 8-9 "7. Library of FIPA interaction protocols ...")

(claim 14) mapping a request from a first module to method means in second module,

(D1, page 109, lines 1-2 "4. Java API to send/receive messages to/from other agents;")

(claim 16) address resolving means,

(D1, page 111, lines 10-11, "... figure out receiver location by simply looking at the :receiver message slot."